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IN THE YEAR TWO THOUSAND FIVE

# AN ACT TO REDUCE MERCURY IN AUTOMOBILES.

*Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:*

## SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.— This Act may be cited as the “Mercury-Free Vehicle Act of 2005.”

(b) TABLE OF CONTENTS.— The table of contents of this Act is as follows:

## SECTION 2. FINDINGS AND DECLARATIONS.

(a) The legislature finds that:

(1) Mercury is a persistent and toxic pollutant that bioaccumulates in the environment.

(2) Forty-one (41) states including Massachusetts have issued fish advisories that warn certain individuals to restrict or avoid consuming fish from bodies of water contaminated with mercury.

(3) The U.S. Food and Drug Administration has advised pregnant women and women of childbearing age who may become pregnant not to eat shark, swordfish, king mackerel, and tilefish due to methyl mercury contamination.

(4) According to National Research Council estimates, over 60,000 babies are

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born annually at risk for adverse neurodevelopmental effects from in utero exposure to methylmercury resulting from the consumption of mercury contaminated fish. These children will have to struggle to keep up in school and might require remedial classes or special education.

(5) Recent findings show historic and current use of mercury in automobiles can cause the release of as much as 10 tons of mercury to the environment each year. Based on the automobile industry's own data, there is an estimated 150-200 tons of mercury contained in the vehicles currently on the road in North America.

(6) Pollution prevention is the preferred strategy, more desirable than waste management and pollution control. Preventing mercury or mercury-containing components from entering thermal combustion units is an effective way to reduce mercury emissions into the environment.

(7) Vehicle mercury switch collection programs are being established across the country to protect human health and the environment.

(b) The legislature declares that the purpose of this Act is to reduce the quantity of mercury in the environment by:

(1) removing mercury from vehicles in commerce and end-of-life vehicles in the Commonwealth of Massachusetts;

(2) creating a collection and recovery program for mercury switches removed from vehicles in the Commonwealth;

(3) establishing a system to store the mercury collected and recovered from vehicle components in the event that environmentally appropriate management technologies are not available; and

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(4) designing future vehicles for maximum environmental protection and recyclability at the end of their useful lives by implementing a Design for Recycling program which includes phasing out the use of mercury in future vehicle models.

### SECTION 3. DEFINITIONS.

For the purpose of this Act:

(a) "Department" means the Department of Environmental Protection.

(b) "Mercury-added component" means a component that contains mercury and which was intentionally added to a vehicle in order to provide a specific characteristic, appearance, or quality or to perform a specific function, or for any other reason. Such components may include, but are not limited to, switches, sensors, lights, and navigational systems.

(c) "Manufacturer" means any person, firm, association, partnership, corporation, governmental entity, organization, combination, or joint venture which is the last person to produce or assemble a new vehicle that utilizes mercury-added components, or in the case of an imported vehicle, the importer or domestic distributor of such vehicle.

(d) "Mercury-added switch", a light switch or an ABS brake system switch installed by an automotive manufacturer in a motor vehicle.

(e) "Scrap recycling facility" means a fixed location, where machinery and equipment are utilized for processing and manufacturing scrap metal into prepared grades and whose principal product is scrap iron, scrap steel or nonferrous metallic scrap for sale for remelting purposes.

(f) "Vehicle recycler" means any individual or entity engaged in the business of acquiring, dismantling or destroying six or more vehicles in a calendar year for the

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primary purpose of resale of their parts.

(g) “Vehicle in commerce” means any vehicle offered for sale by a dealer or registered [by state or in the United States] to be operated on public roads and highways.

(h) “End-of-life vehicle” means any vehicle which is sold, given or otherwise conveyed to a vehicle recycler or scrap recycling facility for the purpose of recycling.

(i) “Capture Rate” means removal, collection, and recovery as a percentage of the total mercury available from vehicles in commerce and end-of-life vehicles annually.

(j) “Manufacturer-Dealer Warranty Program” means an arrangement between a manufacturer and its franchisee(s), whereby the manufacturer agrees to reimburse the franchisee(s), at established rates, for labor or parts necessary to repair a vehicle pursuant to the manufacturer’s original equipment warranty to the original purchaser of the vehicle.

#### SECTION 4. REMOVAL, REPLACEMENT, COLLECTION, AND RECOVERY OF VEHICLE MERCURY SWITCHES.

Within ninety (90) days of enactment of this section, every manufacturer of vehicles sold within Massachusetts shall, individually or as part of a group, submit to the Department for review and approval a plan to remove, collect, and recover mercury switches. The plan shall include:

(a) (1) Removal, Replacement, Collection, and Recovery System.— Vehicle manufacturers shall develop and implement a system to remove; replace, where possible; collect; and recover mercury switches from vehicles in commerce and end of-life vehicles. For vehicles in commerce, the system shall provide for the removal, collection, and recovery of mercury switches, and replace them with mercury-free alternatives,

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where possible; the system shall also provide for the removal, collection, and recovery of mercury switches from end-of-life vehicles.

(2) The removal; replacement, where possible; collection; and recovery system shall include, at a minimum, the following:

(A) an education program to inform the public and other stakeholders about the purposes of the collection program and how to participate in it;

(B) a plan for implementing and financing the system, in accordance with Section 4 paragraph (b);

(C) documentation of the willingness of all necessary parties to implement the proposed system;

(D) information identifying the make, model, and year of vehicles containing mercury switches; a description of the component; the location of these components; and the safe, cost effective, and environmentally sound methods for their removal from vehicles in commerce and end-of-life vehicles.

(E) a mercury switch capture rate of at least 90 per cent, consistent with the principle that mercury switches shall be recovered unless the part is inaccessible due to significant damage to the vehicle in the area surrounding where the mercury switch is located. If the plan is submitted by an individual manufacturer, the 90% capture rate shall apply only to that manufacturer's switches. If a plan is submitted by a group of manufacturers, the collection rate shall apply collectively to all of those manufacturers' switches;

(F) a description of the performance measures to be utilized and reported upon by the manufacturer to demonstrate that the system is meeting the capture rate identified in

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paragraph (E) of this section and other measures of program effectiveness, including, but not limited to, the number of switches collected from both end-of-life and vehicles in commerce, amount of mercury collected, the number of vehicles containing mercury switches, and the number of vehicles processed for recycling;

(G) a description of additional or alternative actions that shall be implemented to improve the system and its operation in the event that the program targets established under paragraph (E) are not met; and

(H) a plan to store the mercury collected and recovered from vehicle components in the event that environmentally appropriate management technologies are not available.

(3) Use of Existing Infrastructure for Mercury Switch Replacement. In developing a removal, replacement, collection, and recovery system, manufacturers shall, to the extent practicable, utilize existing dealerships, service stations, inspection stations, repair shops, and other facilities which regularly service vehicles in commerce. Where a manufacturer does not utilize such infrastructure, the manufacturer shall include in its plan the reasons for establishing a separate removal, replacement, collection, and recovery infrastructure.

(4) Use of Existing End-of-Life Vehicle Infrastructure for Mercury Switch Removal. In developing a removal, collection, and recovery system, manufacturers shall, to the extent practicable, utilize the existing end-of-life vehicle recycling infrastructure. Where a manufacturer does not utilize such infrastructure, the manufacturer must include in its plan the reasons for establishing a separate removal, collection, and recovery infrastructure.

(b) Cost. The total cost of the removal, replacement, collection, and recovery

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system for mercury switches shall be borne by the manufacturer or manufacturers. Costs shall include, but not be limited to, the following:

(1) labor to remove, or replace where possible, mercury switches. Labor shall be reimbursed at the prevailing rate auto manufacturers use to reimburse automotive dealers for replacing faulty switches under the manufacturer-dealer warranty program;

(2) training;

(3) packaging in which to transport mercury switches to recycling, storage or disposal facilities;

(4) shipping of mercury switches to recycling, storage or disposal facilities;

(5) recycling, storage or disposal of the mercury switches;

(6) public education materials and presentations; and

(7) maintenance of all appropriate systems and procedures to protect the environment from mercury contamination.

(c) Plan Approval. The Commissioner of the Department shall:

(1) within 30 days of receipt of a manufacturer's plan or revised plan, issue public notice and solicit public comment on the manufacturer's plan or revised plan;

(2) Within 90 days after receipt of a manufacturer's plan or revised plan:

(A) determine whether the entire plan complies with this section. If the entire plan is approved, the manufacturer shall begin implementation as soon as practicable. If the entire plan is rejected, the Commissioner shall inform the manufacturer as to the reasons for such rejection. The manufacturer will have thirty days thereafter to submit a new plan; or

(B) determine whether any part of the plan meets the requirements of this section

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and shall approve such part(s) and disapprove such other(s) that do not comply with the requirements of this section. The manufacturer shall immediately implement the approved part(s) and submit a revised plan respecting the remaining parts within thirty days after receipt of notification of the Commissioner's disapproval. The Commissioner shall review a manufacturer's revised plan within thirty days of receipt. If found to be acceptable, the revised plan shall be implemented immediately.

(3) 240 days after the date of enactment of this Act, complete, on behalf of a manufacturer, any portion of the plan that has not yet been approved.

(4) The Commissioner of the Department shall review the plan three years after the original date of approval of the plan and every three years thereafter, and shall require modifications to the plan as appropriate.

#### SECTION 5. PROHIBITION AND PROPER MANAGEMENT OF MERCURY-ADDED VEHICLE COMPONENTS.

A person who sells, gives or otherwise conveys ownership of an end-of-life vehicle to a scrap recycling facility for recycling shall remove all mercury-added switches from such end-of-life vehicle prior to delivery to such facility.

Notwithstanding the foregoing paragraph, a scrap recycling facility may agree to accept an end-of-life vehicle (which has not been intentionally flattened, crushed or baled) with mercury-added switches, in which case the scrap recycling facility shall be responsible for removing such switches.

It shall be unlawful for any person to represent that mercury switches have been removed from a vehicle or vehicle hulk being sold, given or otherwise conveyed for

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recycling if that person has not removed such mercury switches or arranged with another person to remove such switches.

SECTION 6. PHASE-OUT OF MERCURY-ADDED VEHICLE  
COMPONENTS AND EXEMPTIONS.

(a) Phaseout of Mercury-Added Components.— To prevent emissions or other releases of mercury from vehicles, effective two vehicle model years from the date of enactment of this Act, no mercury-added component shall be included as part of a new vehicle offered for sale in Massachusetts.

(b) Exemption.— A mercury-added component in a vehicle that is necessary in order to comply with Federal or state health or safety requirements, or for purposes of national security, shall be exempt from the requirements of subsection (a) of this section, provided that:

(1) The manufacturer must apply, or reapply, for such exemption to the Commissioner of the Department.

(2) The application must be in writing, in a form acceptable to the Commissioner of the Department, stating the need for an exemption and the legal basis for an exemption. It must include documentation that there is no technically feasible alternative to the use of mercury in the component and that there is no comparable mercury-free component available at reasonable cost to address the health or safety requirement, or national security. “No technically feasible alternative” does not include the use of mercury for the purpose of marketing.

(A) The application must include a description of how the manufacturer will insure that a system exists, and how the manufacturer will fund such system, for the

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proper removal, collection, and recovery of the mercury-added component while the vehicle is in commerce and at the end of the vehicle's useful life.

(B) Subject to the issuance of public notice and solicitation of public comment, the Department shall, within 90 days, accept or reject the application for exemption.

(3) An exemption application may be submitted to the Commissioner of the Department, subject to public notice and comment, for safety components not required by federal or state law. An exemption may only be granted upon clear demonstration that:

(A) Such components will substantially increase public health and safety considering any impacts the components may have on overall public safety on the roads, and the life-cycle impacts of the mercury use, and

(B) That there is no technically feasible alternative to the use of mercury in the component.

(4) An exemption granted under this section by the Commissioner shall be valid for a period not to exceed two years.

(5) Exemptions granted under this section shall be renewable for periods not to exceed two years.

(6) If granted an exemption, any vehicle that may contain a mercury-added component shall be labeled by the manufacturer in a manner to clearly inform purchasers that mercury is present in the vehicle, and that the component may not be disposed of or placed in a waste stream destined for disposal until the mercury is removed or reused, recovered, or properly disposed of as a hazardous waste or otherwise managed to ensure that the mercury does not become mixed with other solid waste. The label shall identify the component with sufficient detail so that it may be readily located for removal. This

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label shall be placed on the doorpost of each vehicle that may contain a mercury-added component and be constructed of materials that are sufficiently durable to remain legible for the useful life of the vehicle.

(c) Design for Recycling.— Manufacturers, when designing vehicles and their components, shall:

(1) to the maximum extent practicable eliminate hazardous substances from their vehicles;

(2) insure that their vehicles are designed to be recycled in a safe, cost effective, and environmentally sound manner, using existing technologies and infrastructures;

(3) Where a vehicle is found to present environmental risks that make it uneconomical to recycle, the manufacturer shall make appropriate design or manufacturing changes.

#### SECTION 7. GENERAL COMPLIANCE WITH OTHER PROVISIONS.

Except as expressly provided in this Act, compliance with this Act shall not exempt a person from compliance with any other law.

#### SECTION 8. REGULATIONS.

The Commissioner of the Department may promulgate regulations concerning this Act.

#### SECTION 9. REPORTING.

One year after the implementation of the removal, replacement, collection, and recovery system, and annually thereafter, a manufacturer subject to Section 4 of this Act shall report to the Department concerning the performance of the manufacturer's plan.

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The report shall include, but not be limited to, the following:

- (a) a detailed description and documentation of the capture rate achieved;
- (b) a plan to implement additional or alternative actions, if necessary to improve the capture rate;
- (c) a listing of the public educational initiatives implemented, including size of audience reached; and
- (d) any changes in the participation of the necessary parties for the plan to be effectively implemented.

SECTION 10. CIVIL ENFORCEMENT. Comport to state or federal law.

SECTION 11. CRIMINAL ENFORCEMENT. Comport to state or federal law.

SECTION 12. UNIVERSAL WASTE.

The Department shall modify its rules governing universal hazardous waste as appropriate to promote the collection, transport, recovery, and proper management of mercury-added vehicle components.

SECTION 13. PUBLIC EDUCATION AND OUTREACH.

(a) Automobile manufacturers should implement a comprehensive education and outreach program for the general public and the parties willingly participating in the removal, replacement where appropriate, collection and recovery system established under this Act. This education and outreach program should focus on the hazards related to, and the proper handling of, mercury; the requirements and obligations of individuals, manufacturers, and agencies under this Act; and the details of the system established

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under this Act.

(b) In collaboration with automobile manufacturers, the Department should supplement this education and outreach program with an assistance program for businesses that might participate in the removal, replacement where appropriate, collection and recovery system established under this Act.

(c) Willingly participating parties shall implement a public education and outreach program focused on their participation in the collection, replacement where appropriate, collection and recovery system established under this Act.

#### SECTION 14. GOVERNMENT PROCUREMENT.

Notwithstanding other policies and guidelines for the procurement of vehicles, the Operations Services Division shall, within 1 year of the effective date of this section, revise its policies, rules and procedures to give priority and preference to the purchase of mercury-free vehicles taking into consideration competition, price, availability and performance.

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